RADAN

THE TOTAL CAD/CAM SOLUTION FOR THE SHEET METAL INDUSTRY

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Our strength is in providing world class innovative solutions that give you the software applications that are essential to design, manufacture and control production of sheet metal components and products.
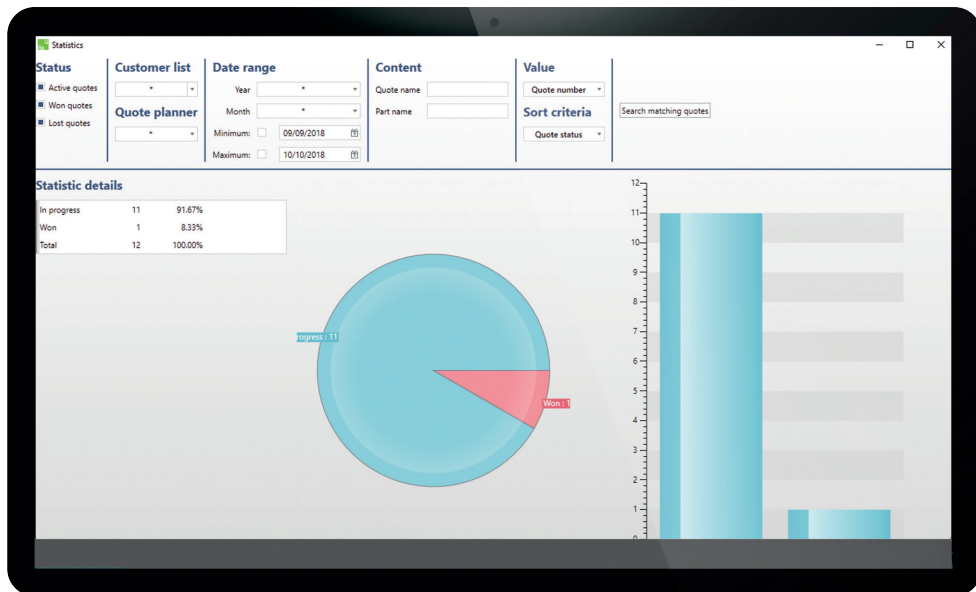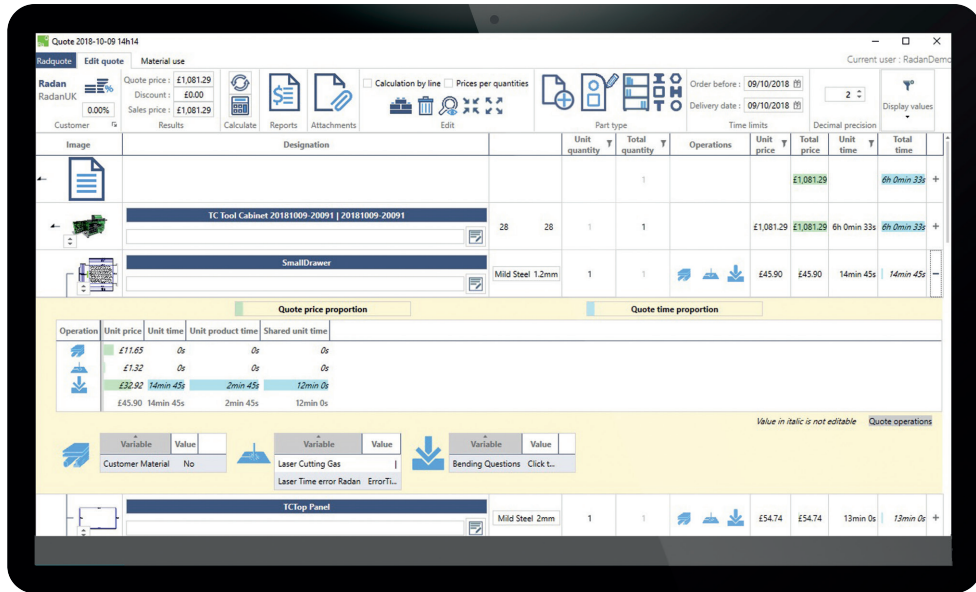
MARKET LEADER FOR 40+ YEARS

That's how long we've been developing software. We've learned a thing or two since we started offering software for sheet metal manufacturers in 1976. Our goal is to develop products and services that help our customers become more successful and profitable.

FIRST CLASS SUPPORT

We understand it's essential to maximise productivity, which is why our support plans are designed with your success in mind. Whether via phone, on-site, email, or our online portal, our technicians are here to help.

QUALITY DRIVES PRODUCTIVITY

We have a proven track record of reliable product delivery and run our software through rigorous testing to ensure that we only release the most stable products to our customers. We listen to our customers' requirements and build answers into the software to meet their expectations now and for the future.

INTELLIGENT QUOTING

Radquote is a sheet metal quotation program that will enable you to quickly and easily create quotes for sheet metal parts and purchased parts. It gives you a full breakdown of the costs and allows you to alter each cost area to give you the flexibility you need when negotiating. Flexible reporting allows you to send professional quotations and make internal reports for analysis. Customer management and reminders help you track active quotes and record success rates.

FLEXIBLE COST CALCULATIONS
Radquote comes with a standard set of cost calculations for operations like material consumption, laser cutting, punching, bending, welding, painting, sub contracting and assembly. These operations can be customised and new operations added to meet your requirements. Quote level operations, such as analysis and transport cost, are also included.

QUICK AND FLEXIBLE DURING NEGOTIATIONS
Radquote gives you a full breakdown of where your costs come from, so that you can see what areas most affect the cost. During negotiations you can quickly adjust your margins and override the calculations to achieve your selling price while maintaining control of your costs.

PROFESSIONAL REPORTS AND LETTERS
Radquote uses a powerful reporting engine to produce professional reports and letters. Radquote comes with a set of standard letters which can be quickly customised to include your company logo and details. You can also add your own layouts and reports.

LINKS TO ERP
Radquote also links seamlessly with most ERP systems, particularly WORKPLAN. This means that if there's a material price rise recorded in the ERP system, Radquote will utilise that information.

MANAGING YOUR QUOTES
When you have issued your quote to a customer, you can set a reminder date and add notes, so that you can manage the follow-up for your quotes. When a quote is won or lost, you can record the result for use in your monthly reports and analysis.

UTILISE THE POWER OF RADAN TO IMPROVE COST ACCURACY
Using the power of the RADAN suite of products makes Radquote a unique, fast and very accurate way to issue, in a few clicks, the quotes you need to grow your business. When negotiating quotes you need to have an accurate view of your costs so that you can be competitive without losing money.

You can use RADAN's 2D and 3D CAD/CAM to create accurate geometry for calculating parameters like profile lengths and part areas. RADAN parts can be nested to get accurate sheet utilisation and apportion scrap to per-part material costs. RADAN tooling can be used to get accurate cutting times and tooling costs. Radquote utilises all this information to give you better control over your margins.

- Utilise geometry and tooling from RADAN parts
- Quickly describe parts without drawing geometry
- Assembly parts supported
- Material cost based on nests
- Common operations supplied as standard
- Customisable operations and calculations
- Flexible reporting
- Cost breakdown analysis
- Customer management
- Follow up call reminders
- Full quote management and statistics

MES

- Real time allocation on jobs + part quantities
- Production management (productive & unproductive tasks)
- Job line report
- Non-conformity management
- Supplier evaluation
- Measuring device
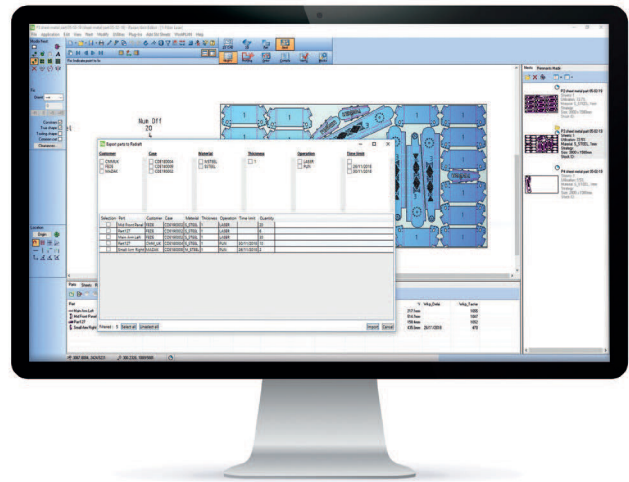- KPI and quality indicator

WORKPLAN AND RADAN

WORKPLAN is an intelligent Project Management solution combining Sales & Production Management and MES functionality within a single database. As the backbone of your manufacturing company, WORKPLAN becomes the main tool centralising your company's data in order to improve your production management. For example, machine events, monitoring, CMMS, CAM supervision, production workflow, and part traceability on the shop floor.

RADAN INTEGRATION

WORKPLAN utilises the powerful dedicated calculation system for sheet metal – Radquote – to build prices with material costs and production times. It also allows all documents to be illustrated with images of the parts. The direct link between RADAN and WORKPLAN guarantees fluent data exchange to improve productivity.

- Sheet metal requirement estimation

- Import parts to be produced in RADAN

- Import stock per material, thickness and sheet size

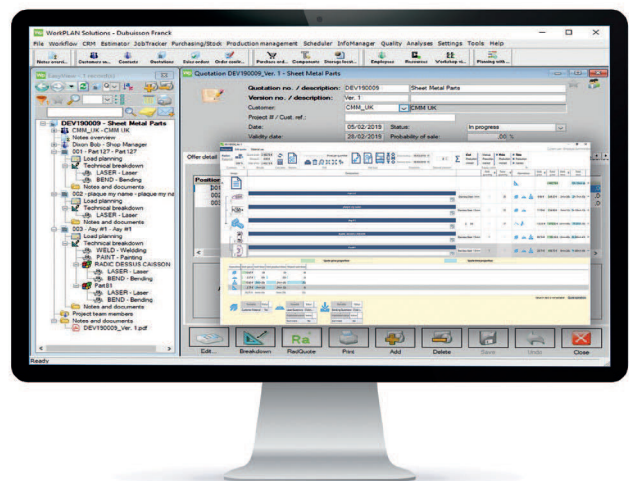- Sync programs directly in WORKPLAN to manage the production

STOCK AND NEST

WORKPLAN offers a simple and efficient stock management solution for sheet metal nests including stock reception/withdrawal, inventory, scrap management and part traceability. Interfaced with the CAM programming software, data reporting in WORKPLAN and deduction of sheets consumed is available with just a few clicks.

ACTIVITY BASKET

When several tasks from different projects are performed simultaneously within a single production operation (punching, laser cutting, etc.), it is hard to monitor and assign real time activities without unbalancing job reports. WORKPLAN includes the concept of an activity basket where it is possible to create a basket of operations grouped by service, and manage the cost distribution according to your needs.

- Simple and user-friendly
- Industry specific sheet metal features
- Fast geometric construction
- Increased productivity
- Reliable data exchange in DXF, DWG and IGES
- Facilitates collaboration between contractors and subcontractors
- Full automation

HIGHLY EFFICIENT CAD SPECIALISED FOR SHEET METAL

A central element of your CAM system, RADAN 2D provides users with a complete solution for 2D drawings which incorporates sheet metal industry expertise.

Its many features and easy-to-use graphical interface make RADAN 2D a reliable and economical solution. One of the main requirements of a CAM system used in a production environment is the ability to support innacurate 3rd party data.

RADAN 2D offers a quick and simple method to repair or simplify geometry imported from other systems.

With the addition of the optional package 'parametrics' you can easily generate variations on recurring parts in a fully automatic process.
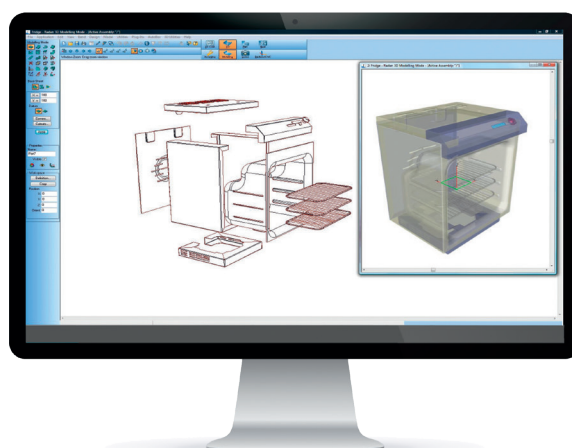
As RADAN 2D can be driven manually, or from a simple spreadsheet, it is possible to automatically create flat patterns of parts to produce and create compatible output that can be used by the rest of the RADAN product portfolio.

3D MODELLING, PART UNFOLDING, AND SHEET METAL FEATURES

RADAN 3D is a fully integrated software application which provides expert functionality in the field of sheet metal CAD modelling. Simple to use, and fast, RADAN 3D provides unmatched productivity for designing your parts and sheet metal assemblies.

Unfolding, notching, managing corners and bend allowance are all standard features when creating geometry using RADAN 3D. This module of the software suite gives the user very easy access to the world of 3D modelling which is essential to companies working in sheet metal.

- Design of parts and assemblies using sheet metal specialist construction methods
- Rapid generation of complex panels
- Automatic unfolding assistant
- User-defined corner solutions
- Automatic unfolding of imported 3D models fully integrated into the software suite

From an external model, RADAN 3D is able to rebuild geometry with sheet metal features.

- Management of toolsets and dies
- Supports advanced punching functions
- Automatic or manual unloading of parts
- Graphical reports
- Fully automatic multi-part nesting
- Optimised punching sequence
- Common slitting and automatic repositioning of clamps

- Real-time cut in connection with your production management
- Reduced start up-time
- Quick and easy transfer of production from one machine to another

PROGRAMMING FOR CNC PUNCHING MACHINES

Radpunch is a market leading solution for the programming punching machines. With over 40 years of punching experience, RADAN successfully drives thousands of punching machine tools worldwide.

This history easily allows us to integrate different generations of punching machines taking into account modern facilities such as FMS cells with component loader and unloaders.

The technological basis of integrated punching inside Radpunch means you will be able to automate the programming phases, regardless of the tools used (standard, special, forming, wheels etc.)

Understanding the sophistication and the limits of each machine tool individually is the key to driving it efficiently. Radpunch will assist your operators to optimise your manufacturing capacity to within those limits for all of your machines.
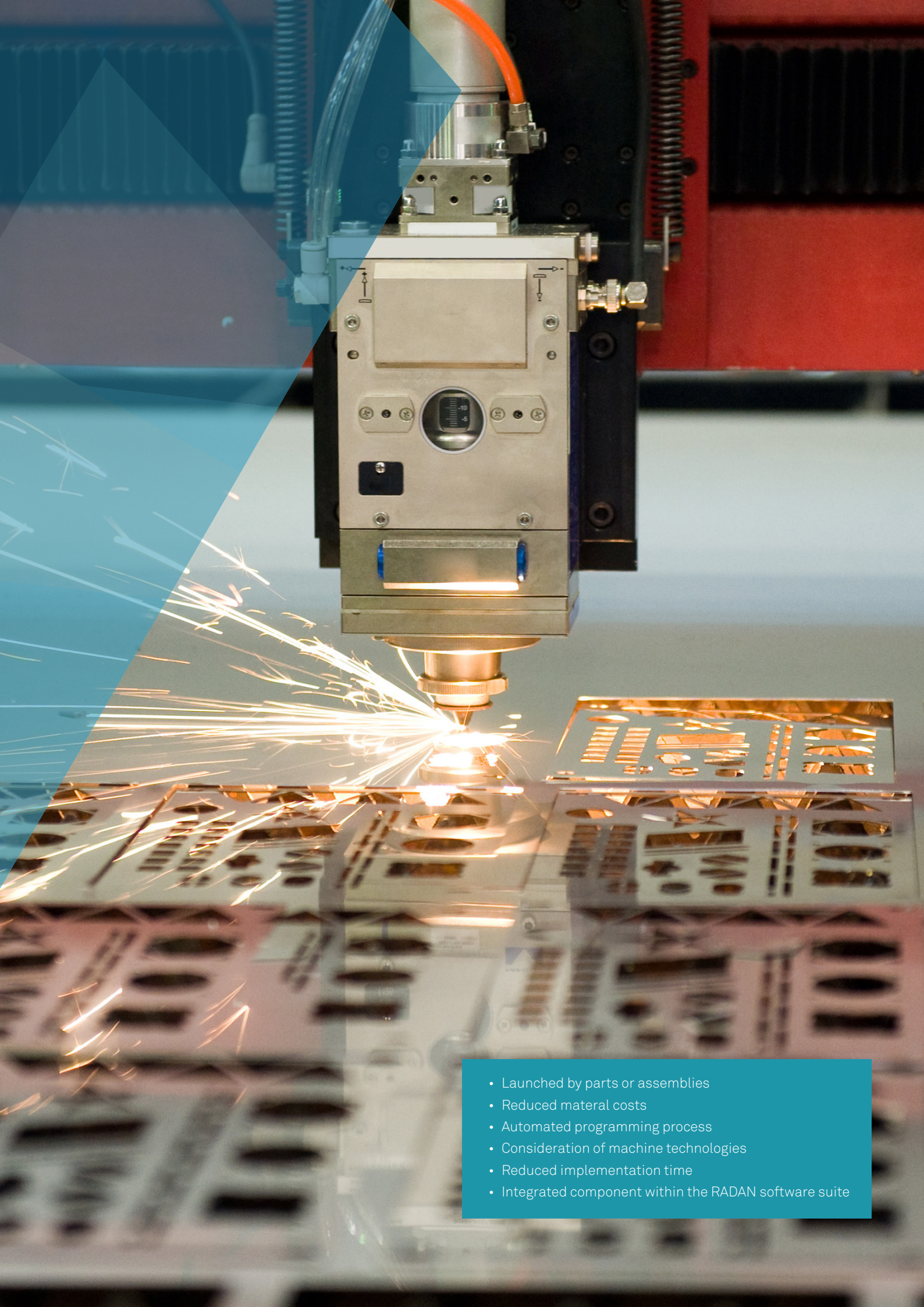
PROGRAMMING FOR LASER CUTTING, PLASMA OR WATERJET MACHINES

Radprofile is a highly automated software solution for laser cutting, plasma, waterjet, and flame cutting machines. Radprofile seamlessly integrates the whole programming process of geometry creation, nesting, cutter patch calculation, sequencing, code generation, and finally DNC connectivity to the machine controller.

Your machines then function with a direct link to production and sales orders. The pieces are well managed according to the sheet production strategies specified by the technical operator. Each nest is converted into machine language in just a few seconds to be readily available for production.

All the technological functions of your machines are integrated into Radprofile: marking, vaporizing, plastics, pulsed, small and large contours, slowdowns, rapid cuts… are all perfectly managed Radprofile modes. The cutting functions of text or scanned drawings are quickly accessible in the software.

An exclusive feature positions lead-ins ensuring safe movement and increases productivity. The software also automatically manages the order of cutting depending on the heat build-up in the material.

- Launched by parts or assemblies
- Reduced materal costs
- Automated programming process
- Consideration of machine technologies
- Reduced implementation time
- Integrated component within the RADAN software suite

AUTOMATIC NESTING ADAPTED TO PUNCHING AND CUTTING MACHINES
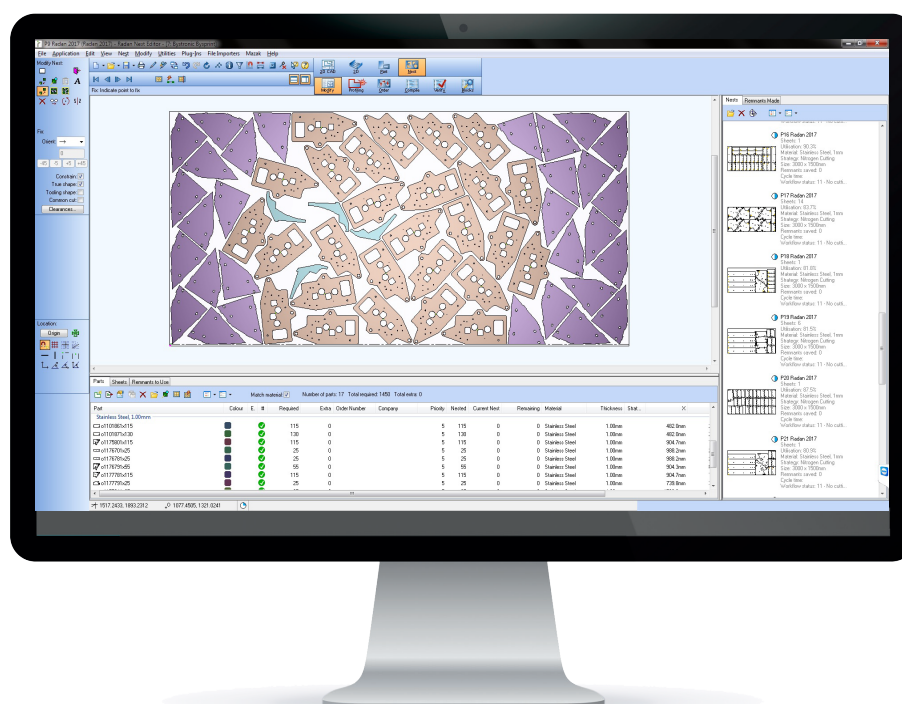
HIGH LEVELS OF AUTOMATION

It is easy to manage the workflow of your machines thanks to the intelligent features of the integrated project mode in Radnest.

This mode manages your production taking into account your raw materials inventory and disposable drops as well as your customers' deadlines and priorities.

Radnest is the nesting solution that enriches both Radpunch and Radprofile. Radnest significantly optimises the use of the sheet and generates substantial savings on raw materials.

Radnest interfaces with the production management system you use. This avoids manual input and significantly reduces the risk of error. Radnest coordinates the order of cutting and post-processor operations to automatically generate programs. The nesting algorithm analyses the exact shape of the parts, nests them and adapts the number of components to be manufactured and the amount of sheet stock required.

Radnest analyses all the available sheet sizes allowing the optimum use of material for the production. The differences in parameters between parts are integrated into the technological base by material / thickness / machine to ensure a reliable and optimum production.

- Intuitive interface with external CAD tools
- Customisable machinery with posts processors
- Library of tubes and standard patterns
- Automatic nesting on tubes
- Instant generation of laser path
- Easy and fast manual retouching
- Total control of head angles
- Cutting technology controal at all points
- Import and machining of 3D models

PROGRAMMING OF TUBE CUTTING MACHINES

Radtube interfaces with any CAD solution on the market. It comes with standard interfaces such as IGES and DXF, but also comes with native formats like DWG, Inventor, VISI, SolidWorks, Solid Edge, and IronCAD.

These are however not exhaustive and several options are available such as Catia V4-V5, Unigraphics, Pro Engeneer, VDA and STEP. Although the model can be wireframe, surface or solid, the software perfectly applies the toolpath in each geometry type.

Radtube is compatible with most machines on the market such as Adige, NTC, Trumpf, Mazak and Amada… If a machine is not on the list, Radtube fits the definition of the machinery to achieve the processors on demand.

Radtube supplies a library of parametric tube shapes that simplifies the creation of tubes to be cut. If a suitable section does not exist, the 'Freeform' option is used to create the special shape section. If none of the standard shapes are suitable, it is possible to construct the outside / inside shape using the integrated 3D CAD tools.

MULTI-AXIS LASER CUTTING

Radm-ax is the multi-axis extension of Radtube and allows the programming of laser cutting machines, water jet, and other technologies. These two programs share the same basic graphics so naturally you will find them similar in Radm-ax's capacity of the import and treatment of 2D and 3D files.

Radm-ax delivers proven post processors dedicated to the main 5-axis cutting machines on the market (NTC, Prima, Trumpf, Mazak, Amada …).

Radm-ax also has a powerful post-processor generator to finalise the CNC code and achieve a precise definition of the machine simulation.

Collision detection of the cutting/machine head uses very fast algorithms, making it simple and safe for programming.

Radm-ax contains ultra-powerful utilities to generate and automatically cut the component's support fixture. The process of holding the workpiece on the cutting table is assured throughout by Radm-ax to secure the cut.

- Single programming tool for all your machines
- Collision detection
- Reduce unproductive machine time
- Availability of upstream manufacturing information
- Import of 2D or 3D parts
- Guarantee good results with initial parts
- Realistic simulation of the folding process
- Increases your independence in relation to your manufacturers

PROGRAMMING OF CNC PRESS BRAKES

Radbend can greatly increase the productivity of press brakes.

Compatible with all numerically controled generations of bending machines, the offline preparation can significantly increase the production time of the press brakes.

Collision detection, bending sequence, and the calculation of the finger-stops are used to generate a reliable document for the operator as well as the NC program.
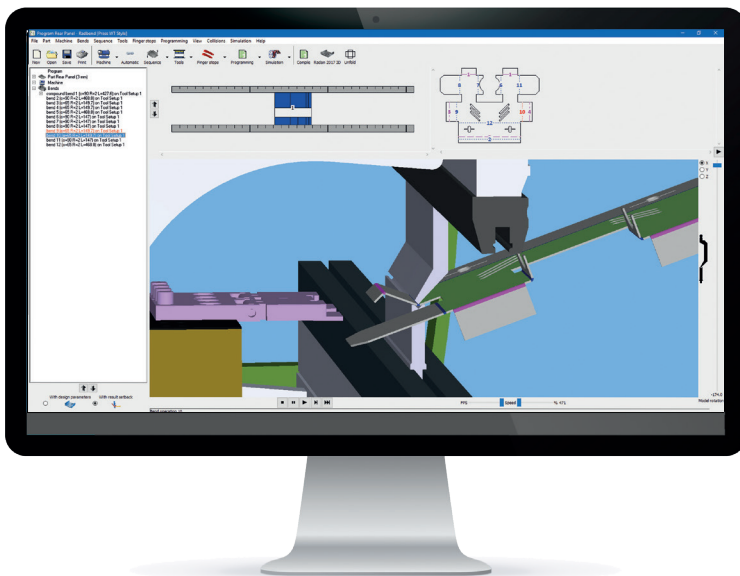
For brakes without a communication port, simply insert the values of the document into the controller of the machine to start production.

The software includes advanced features such as automatic calculation of bending sequences, automatic tool selection and automatic positioning of the finger-stops. All these functions can be accessed quickly and easily, enabling simple programming for high productivity.

During the process of programming and simulation, Radbend calculates potential collisions with the tools or the press brake.

This essential process ensures high reliability in the program. If a collision is detected, Radbend signals this with a color (depending on the nature of the collision) and issues a warning message.

The user has all the features to analyse and resolve any collisions that may occur during the different phases of folding.

- Authorised Training Center
- Software Installation
- Hotline
- Remote Support
- Customisable Software
- Technology Integration
- CAM Automation

WE LISTEN

RADAN is at the heart of the sheet metal industry, where the most efficient production techniques based on punching, cutting and combination machines produce parts ready to be folded on press brakes. Our software covers all of these requirements and are continuously updated and improved by our development teams; a strategy that goes back to the creation of RADAN in 1976.

OUR RANGE OF MODULAR AND INTEGRATED SOFTWARE INCLUDES

- Radimport : to import your native 2D-3D files.
- Raquote : for producing fast and accurate quotes.
- RADAN 2D : 2D drawing in sheet metal.
- RADAN 3D : 3D modelling and specialised sheet metal unfolding.
- Radnest : for automatic nesting of parts on a sheet.
- Radpunch, Radprofile, Radbend to drive your CNC machines.

OVER 5,000 DIFFERENT MACHINES ARE SUPPORTED

The RADAN headquarters are located in Bath, England, and the company has offices in Germany, Italy, France, Japan, USA, Netherlands, China, Korea, Spain and India supplying products to more than 45 countries through its wholly owned subsidiaries and global reseller network.

Since 2003, RADAN has been part of an international group specialising in software for the design and manufacturing market. Being one of the largest global providers of industrial software guarantees our security and performance to our customers, while benefiting from the synergies inherent in the company. Finally, the financial strength of our group allows us to continually invest more in product innovations to bring you the technology of tomorrow.

The satisfaction of RADAN customers, worldwide, demonstrates our sucess. Our driving passion is to support our sheet metal customers every day through our services and software business to ensure:

- PRODUCTIVITY
- RELIABILITY
- FLEXIBILITY
- PROFITABILITY

HEXAGON
MANUFACTURING INTELLIGENCE

Hexagon Manufacturing Intelligence helps industrial manufacturers develop the disruptive technologies of today and the life-changing products of tomorrow. As a leading metrology and manufacturing solution specialist, our expertise in sensing, thinking and acting – the collection, analysis and active use of measurement data – gives our customers the confidence to increase production speed and accelerate productivity while enhancing product quality.

Through a network of local service centres, production facilities and commercial operations across five continents, we are shaping smart change in manufacturing to build a world where quality drives productivity. For more information, visit **HexagonMI.com**.

Hexagon Manufacturing Intelligence is part of Hexagon (Nasdaq Stockholm: HEXA B; **hexagon.com**), a leading global provider of information technologies that drive quality and productivity across geospatial and industrial enterprise applications.

COORDINATE MEASURING MACHINES

3D LASER SCANNING

SENSORS

PORTABLE MEASURING ARMS

SERVICES

LASER TRACKERS & STATIONS

MULTISENSOR & OPTICAL SYSTEMS

WHITE LIGHT SCANNERS

METROLOGY SOFTWARE SOLUTIONS

CAD / CAM

STATISTICAL PROCESS CONTROL

AUTOMATED APPLICATIONS

MICROMETERS, CALIPERS AND GAUGES

DESIGN AND COSTING SOFTWARE